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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,669	08/28/2003	Isao Yako	Q77162	5683
23373	7590	07/24/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			GIESY, ADAM	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,669

Applicant(s)

YAKO, ISAO

Examiner

Adam R. Giesy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,10-13,15, and 16 is/are rejected.
- 7) ☒ Claim(s) 2,7,9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 5, 6, 8, 10, 12, 13, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Heo (US Pat. No. 6,597,645 B2).

Regarding claim 1, Heo discloses an information reproduction system comprising: an information reproduction apparatus which generates an audio signal from audio information and outputting the audio signal (see Figure 27, elements 111-116); an output apparatus which outputs the audio signal output from the information reproduction apparatus, to output lines (117); and an output control apparatus which controls output of the audio signal in the output apparatus to the output lines (Figure 28), wherein the output control apparatus comprises: a storage device which stores output control information in order to control output of the audio signal in the output apparatus to the output lines (Figure 28, element 210); a control device which controls the output apparatus based on the output control information stored by the storage device (210); and a transmitter device which transmits the output control information stored by the storage device to outside (215), and the information reproduction apparatus comprises: a receiver device which receives the output control information transmitted from the output control apparatus (Figure 27, element 116); an output

channel determination device which determines output channels for the audio signal based on the output control information received by the receiver device (117); an information acquisition device which acquires the audio information (114); a signal generation device which generates an audio signal corresponding to the output channels determined by the output channel determination device, from the audio information acquired by the information acquisition device (115); and a signal output device which outputs the audio signal generated by the signal generation device (117).

Regarding claim 3, Heo discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the information reproduction apparatus further comprises a request device which requests the output control apparatus to transmit the output control information (Figure 27, element 117).

Regarding claim 5, Heo discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the audio information contains audio substance information which is information concerning audio itself, and output channel indication information which indicates output channels for an audio signal generated from the audio substance information (see Figure 9B), the signal generation device in the information reproduction apparatus comprises: a decision device which compares the output channels indicated by the output channel indication information contained in the audio information acquired by the information acquisition device, with the output channels determined by the output channel determination device, and conducts conformity decision processing to decide whether those output channels conform to each other (Figure 28, element 212); and a synthesis device, responsive to

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nonconformity of the output channels indicated by the output channel indication information to the output channels determined by the output channel determination device in a result of a decision effected by the decision device, which conducts signal synthesis processing in order to make the output channels for an audio signal conform to each other, in generating the audio signal from the audio substance information contained in the audio information (216).

Regarding claim 6, Heo discloses all of the limitations of claim 5 as discussed in the claim 5 rejection above and further that the audio information is divided into audio information units, and the audio information contains output channel indication information in order to indicate output channels for each of the audio information units (see Figure 9B – note that the middle block in each row designates a channel and that the block immediately to the right of the middle block gives the channel contents), and the signal generation device in the information reproduction apparatus conducts the conformity decision processing and the signal synthesis processing, based on output channel indication information corresponding to each of the audio information units, whenever reproducing the audio information units (Figure 28, element 212 – note that stream selector helps to select the channel based on the incoming signal and the timing controller).

Regarding claim 8, Heo discloses an information reproduction apparatus for generating an audio signal from audio information and outputting the audio signal, the information reproduction apparatus comprising: a receiver device which receives output control information from another device that holds the output control information for

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controlling output of the audio signal output from the information reproduction apparatus to output lines (see Figure 27, element 116); an output channel determination device which determines output channels for the audio signal based on the output control information received by the receiver device (117); an information acquisition device which acquires the audio information (114); a signal generation device which generates an audio signal corresponding to the output channels determined by the output channel determination device, from the audio information acquired by the information acquisition device (115); and a signal output device which outputs the audio signal generated by the signal generation device (117).

Regarding claim 10, Heo discloses all of the limitations of claim 8 as discussed in the claim 8 rejection above and further that the information reproduction apparatus comprises a request device which requests the output control information holding device to transmit the output control information (Figure 27, element 111).

Regarding claim 12, Heo discloses all of the limitations of claim 8 as discussed in the claim 8 rejection above and further that the audio information contains audio substance information which is information concerning audio itself, and output channel indication information which indicates output channels for an audio signal generated from the audio substance information (see Figure 9B), the signal generation device in the information reproduction apparatus comprises: a decision device which compares the output channels indicated by the output channel indication information contained in the audio information acquired by the information acquisition device, with the output channels determined by the output channel determination device, and conducts

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conformity decision processing to decide whether those output channels conform to each other (Figure 28, element 212); and a synthesis device, responsive to nonconformity of the output channels indicated by the output channel indication information to the output channels determined by the output channel determination device in a result of a decision effected by the decision device, which conducts signal synthesis processing in order to make the output channels for an audio signal conform to each other, in generating the audio signal from the audio substance information contained in the audio information (216).

Regarding claim 13, Heo discloses all of the limitations of claim 12 as discussed in the claim 12 rejection above and further that the audio information is divided into audio information units, and the audio information contains output channel indication information in order to indicate output channels for each of the audio information units (see Figure 9B – note that the middle block in each row designates a channel and that the block immediately to the right of the middle block gives the channel contents), and the signal generation device conducts the conformity decision processing and the signal synthesis processing, based on output channel indication information corresponding to each of the audio information units, whenever reproducing the audio information units (Figure 28, element 212 – note that stream selector helps to select the channel based on the incoming signal and the timing controller).

Regarding claim 15, Heo discloses a computer program embodied in a memory medium, which can be read by a computer in an information reproduction apparatus for generating an audio signal from audio information and outputting the audio signal, the

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computer program causing the computer to function as: a receiver device which receives output control information from another device that holds the output control information for controlling output of the audio signal output from the information reproduction apparatus to output lines (Figure 27, element 116); an output channel determination device which determines output channels for the audio signal based on the output control information received by the receiver device (117); an information acquisition device which acquires the audio information (114); a signal generation device which generates an audio signal corresponding to the output channels determined by the output channel determination device, from the audio information acquired by the information acquisition device (115); and a signal output device which outputs the audio signal generated by the signal generation device (117).

Method claim 16 is drawn to the method of using the corresponding apparatus claimed in claim 1. Therefore method claim 16 corresponds to apparatus claim 1 and is rejected for the same reasons of anticipation (obviousness) as used above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heo (US Pat. No. 6,597,645 B2).

Regarding claim 4, Heo discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above. Heo discloses the claimed invention except for the separate elements being connected via a bus. It would have been an obvious matter of design choice to allow all the components to connect via a bus since the applicant has not disclosed that the bus connection solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with hard-line connections.

Regarding claim 11, Heo discloses all of the limitations of claim 8 as discussed in the claim 8 rejection above. Heo discloses the claimed invention except for the receiver being connected via a bus. It would have been an obvious matter of design choice to allow all the components to connect via a bus since the applicant has not disclosed that the bus connection solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with hard-line connections.

Allowable Subject Matter

5. Claims 2, 7, 9, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 2 is allowable over the prior art of record which does not disclose or suggest alone, or in combination, all of the limitations of claim 1, as well as the further limitation that **the output control information contains speaker connection information which indicates whether speakers are connected to the output line of the output apparatus, and in the information reproduction apparatus, the output**

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channel determination device decides whether speakers are connected to the output lines, based on the speaker connection information contained in the output control information, and determines output channels for the audio signal based on a result of the decision.

Claim 7 is allowable over the prior art of record which does not disclose or suggest alone, or in combination, all of the limitations of claim 5, as well as the further limitation that **the audio information contains synthesis processing permission/prohibition information for indicating whether the signal synthesis processing is permitted or prohibited, and the signal generation device in the information reproduction apparatus decides whether the signal synthesis processing is permitted, based on synthesis processing permission/prohibition information contained in the audio information that has been acquired by the information acquisition device, and conducts the signal synthesis processing only when the signal synthesis processing is permitted as a result of the decision.**

Claim 9 is allowable over the prior art of record which does not disclose or suggest alone, or in combination, all of the limitations of claim 8, as well as the further limitation that **the output control information contains speaker connection information which indicates whether speakers are connected to the output lines of the output apparatus, and the output channel determination device decides whether speakers are connected to the output lines, based on the speaker**

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connection information contained in the output control information, and determines output channels for the audio signal based on a result of the decision.

Claim 14 is allowable over the prior art of record which does not disclose or suggest alone, or in combination, all of the limitations of claim 12, as well as the further limitation that **the audio information contains synthesis processing permission/prohibition information for indicating whether the signal synthesis processing is permitted or prohibited, and the signal generation device decides whether the signal synthesis processing is permitted, based on synthesis processing permission/prohibition information contained in the audio information that has been acquired by the information acquisition device, and conducts the signal synthesis processing only when the signal synthesis processing is permitted as a result of the decision.**

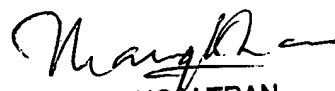
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 7/20/2006



THANG V. TRAN
PRIMARY EXAMINER